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## What is claimed is:

1.tooth contour A tooth contour structure for large sprocket set of bicycle, wherein the large sprocket set at least includes a smaller sprocket and an adjacent larger sprocket, and the large sprocket set tooth contour structure may facilitate a bicycle chain when under the drag of a speed converter to be shifted from the smaller sprocket up to the larger sprocket, by the assistance of an unique tooth contour structure, a shifting up action may be proceeded at the position of the tooth contour structure, wherein the characteristics are:

the larger sprocket is arranged at least a set of second tooth group; each set of the second tooth group all is individually comprised of at least three characteristic teeth, along the chain's shifting-up direction, the three characteristic teeth in sequence are called a first characteristic tooth, a second characteristic tooth, and a third characteristic tooth; the first characteristic tooth is closer to the side of the second characteristic tooth and has an curve surface and a cutting portion, and a tooth valley bottom edge between the first characteristic tooth and the second characteristic tooth is formed by the stamping into a projection surface that is biased toward the smaller sprocket, and the curvature of a top edge of the projection surface is designed in accordance with the path and curvature for the shifting up of the chain, and a recession is arranged at the lower portion of the first characteristic tooth.

- 2. The tooth contour structure for large sprocket set of bicycle as the claim 1, wherein, the top edge is formed with a slant angle.
- 3. The tooth contour structure for large sprocket set of bicycle as the claim 1, wherein, the recession is extended from the tooth bottom of the first characteristic tooth to the proximity of the tooth bottom of the prior tooth.
  - 4. The tooth contour structure for large sprocket set of bicycle as the claim 1, wherein, the cutting portion is located at the lower end of the curve surface and the side end of the top edge of the butting against surface.
    - 5. The tooth contour structure for large sprocket set of bicycle as the

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claim 1, wherein, a recessed tooth valley structure is arranged at the side of the second characteristic tooth being toward the third characteristic tooth by deeply cutting with predetermined curvature and depth.

- 6. The tooth contour structure for large sprocket set of bicycle as the claim 1, wherein, instead of being located at the tooth top, the butting against surface is located at the tooth valley bottom edge between the first characteristic tooth and the second characteristic tooth, so when the chain is held against by the butting against surface, the chain won't be raised up.
- 7. The tooth contour structure for large sprocket set of bicycle as the claim 1, wherein, the tooth top of the first characteristic tooth is cut off with a predetermined height to become a shorter short tooth.
- 8. The tooth contour structure for large sprocket set of bicycle as the claim 1, wherein, the tooth top of the second characteristic tooth is cut off with a predetermined height to become a shorter short tooth.